

Date: Tuesday, 19/08/2008 11:23:10 AM  
 User: Julie Lecocq

## Process Sheet

|                                    |  |                           |                                  |
|------------------------------------|--|---------------------------|----------------------------------|
| <b>Customer</b> :                  | CU-DAR001 Dart Helicopters Services  | <b>Drawing Name</b> :     | 212/205 HIGH AFT X-TUBE ASSEMBLY |
| <b>Job Number</b> :                | 41401  | <b>Part Number</b> :      | D212664201                       |
| <b>Estimate Number</b> :           | 10257  | <b>Drawing Number</b> :   | D212-664-241 REV C               |
| <b>P.O. Number</b> :               |  | <b>Project Number</b> :   | N/A                              |
| <b>This Issue</b> :                | 19/08/2008   | <b>S.O. No.</b> :         |                                  |
| <b>Prsht Rev.</b> :                | NC   | <b>Drawing Revision</b> : | C                                |
| <b>First Issue</b> :               | 1/1  | <b>Material</b> :         |                                  |
| <b>Previous Run</b> :              | 40508  | <b>Due Date</b> :         | 05/09/2008                       |
| <b>Written By</b> :                |  | <b>Qty:</b>               | 1 Um: Each                       |
| <b>Checked &amp; Approved By</b> : | JLD 08.8.19  |                           |                                  |
| <b>Comment</b> :                   | Est Rev:E 04.02.16 Reformat K/DS<br>Est Rev:F 06-03-29 Remove Comments on Pick List JLM<br>Est Rev:G 07-04-30 As per Rev C JLM<br>Est Rev:H 08-05-22 up date Qty of rubber cushion DD verified by:EC |                           |                                  |

## Additional Product

Job Number:



|                |                              |                      |
|----------------|------------------------------|----------------------|
| <b>Seq. #:</b> | <b>Machine Or Operation:</b> | <b>Description :</b> |
|----------------|------------------------------|----------------------|

|     |    |                  |
|-----|----|------------------|
| 1.0 | DC | DOCUMENT CONTROL |
|-----|----|------------------|



JLD 08.8.28



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels as per PPP D212-664-201CHG003

JLD 08.8.28

|     |             |                       |
|-----|-------------|-----------------------|
| 2.0 | PACKAGING 1 | PACKAGING RESOURCE #1 |
|-----|-------------|-----------------------|



Comment: PACKAGING RESOURCE #1

|     |               |                          |
|-----|---------------|--------------------------|
| 3.0 | D212664201TRN | Crosstube Turning Detail |
|-----|---------------|--------------------------|



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

CROSSTUBE TURNING DETAIL

batch 40799

D M 8-8-21

|     |         |                             |
|-----|---------|-----------------------------|
| 4.0 | BENDING | BENDING MACHINE - SKIDTUBES |
|-----|---------|-----------------------------|



Comment: BENDING MACHINE

Bend tube as per Dwg D212-664-241 using CNC bender program 212-af and Folio FT007

DD 8-8-21

|     |      |                              |
|-----|------|------------------------------|
| 5.0 | QC15 | DIMENSIONAL CHECK OF X-TUBES |
|-----|------|------------------------------|



Comment: DIMENSIONAL CHECK OF X-TUBES

JLD 08.8.25

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

Date: Tuesday, 19/08/2008 11:23:11 AM  
User: Julie Lecocq

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 212/205 HIGH AFT X-TUBE ASSEMBLY

Job Number: 41401

Part Number: D212664201

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

CROSSTUBES

CROSSTUBES RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Drill pilot holes in tube as per Dwg D212-664-241 using drill Jig DT8550 & DT8551

2-Ream hole to finish size in tube as per Dwg D212-664-241 using drill Jig DT8550 & DT8551. Check dimensions between holes, both sides on both cuffs, to ensure alignment with saddle holes.

3-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D212-664-241

4-Scribe part # and batch # using vibrating stylus as per Dwg D212-664-241

8T  
08-08-25  
8-8-25

8T 08-08-25

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



AWM 8-8-25



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1 within 24 hours of bending and drilling

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

S 08/08/26

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 08/08/26

10.0

OUTSIDE SERV.10

OUTSIDE SERVICES -skids



Comment: Sub-Contracting OUTSIDE SERVICES

Liquid Penetrant Inspection as per QSI 038

Issue P/O: 7041

LPI as per ASTM 1417 Level 2

Attach copy of NDT results to work order

CY 08/08/28  
D

11.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Inspect for transit damage Ensure copy of NDT results attached to work order.

P 8/8/28

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

Date: Tuesday, 19/08/2008 11:23:11 AM  
User: Julie Lecocq

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 212/205 HIGH AFT X-TUBE ASSEMBLY

Job Number: 41401

Part Number: D212664201

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: DIMENSIONAL CHECK

Inspect for damage & ensure results are as per Dwg D212-664-241

08/08/28 (1)

8/8/24

13.0

SPRAY PAINTING

SPRAY PAINTING



Comment: SPRAY PAINTING

1-Prime inside and outside crosstube as per QSI 005 4.2

2-Paint outside crosstube with White Imron as per QSI 005 4.2

ml 08 09 03 (1)

14.0

QC14

INSPECT SPRAY PAINT



Comment: Inspect Spray Paint

Then, Wrap in plastic bag to protect from scratches

08-09-04 (1)

15.0

D29401

Support



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part number Description Batch

2 D2940-1

Support

39685

ml 08 09 04

16.0

D3595063530

RUBBER CUSHION



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Rubber Cushion

Batch:

39255

ml 08 09 04

17.0

MS2192028

Clamp(per MIL-DTL-8783C)



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part number Description Batch

4 MS21920-28

Clamp

108847

ml 08 09 04

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

Date: Tuesday, 19/08/2008 11:23:11 AM  
User: Julie Lecocq

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 212/205 HIGH AFT X-TUBE ASSEMBLY

Job Number: 41401

Part Number: D212664201

Job Number:



Seq. #:

Machine Or Operation:

Description :

18.0

CROSSTUBES

CROSSTUBES RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1- Lightly scuff the bonded area using a 320 grit sand paper and clean the area with 41058 wash 'n' wipe

2-Install supports with magnobond as per QSI 015 Adhere for for 12 Hrs

A/R 6398 Magnobond Batch: 108966

Expiry Date: 12/2009

Time: 12:30 PM

3-Install clamps as per Dwg D212-664-241. Torque clamps to 80-100 in lb.

ml  
08 09 04 (1)

ml 08 09 05 (1)

19.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08.09.05 (1)

20.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

21.0

D34281

Placard



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Placard

Batch: 39322.

SS 08/09/05 x1

22.0

AN640A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Bolt

Batch: M67971

SS 08/09/05 (x1)

23.0

AN641A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Bolt

Batch: M107013

SS 08/09/05 (x1)

B41401 D212-664-201

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



Date: Tuesday, 19/08/2008 11:23:11 AM  
User: Julie Lecocq

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 212/205 HIGH AFT X-TUBE ASSEMBLY

Job Number: 41401

Part Number: D212664201

Job Number:



Seq. #:

Machine Or Operation:

Description :

24.0

AN960JD616

Washer



Comment: Qty.: 18.0000 Each(s)/Unit Total : 18.0000 Each(s)

Washer

Batch:

M167959

JS 08/09/05 (A)

25.0

MS21042L6

Nut



Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s)

Nut

Batch:

M105077

JS 08/09/05 (X)

26.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

S 08/09/05 (A)

27.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Identify and pack for shipping as per PPP D212-664-201

MF

JS 08/09/05 (A)

28.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/09/10 JS

Job Completion



MF 08-09-08

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

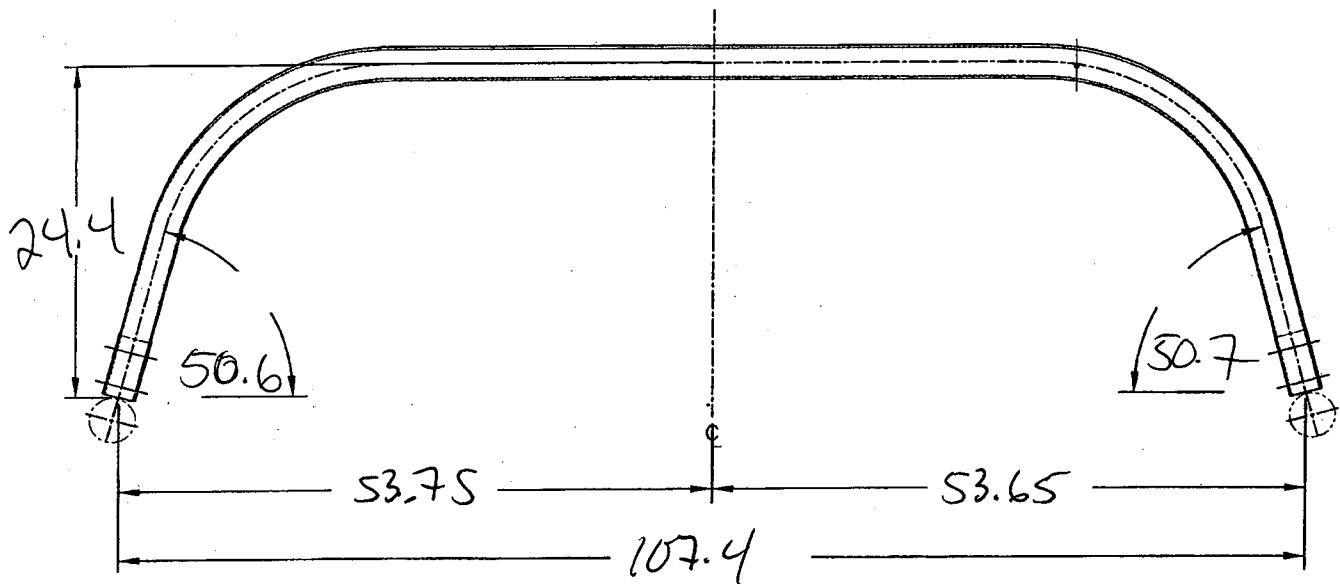
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

|   |  |              |              |
|---|--|--------------|--------------|
| DART AEROSPACE LTD                        |  | Work Order:  | 41401        |
| Description: Crosstube High Aft (205/212) |  | Part Number: | D212-664-201 |
| Inspection Dwg: D212-664-241 Rev: C       |  | Page 1 of 1  |              |

| Required Dimension | Min    | Max    |
|--------------------|--------|--------|
| Height             | 24.17  | 24.43  |
| 1/2 Span           | 53.59  | 53.85  |
| Angle              | 49     | 52     |
| Total Span         | 107.18 | 107.70 |



| Comments |
|----------|
|          |
|          |
|          |
|          |

|                 |          |
|-----------------|----------|
| QC15 Inspection |          |
| Date            | 06.06.25 |

| Rev | Date     | Change                            | Revised by | Approved |
|-----|----------|-----------------------------------|------------|----------|
| A   | 07.02.06 | New Issue                         | KJ/JM      |          |
| B   | 07.05.08 | Dimensions updated per Dwg rev. C | KJ/JLM     |          |

**DART**

|                               |                                |  |                        |
|-------------------------------|--------------------------------|--|------------------------|
| DESIGN<br><i>PH</i>           | DRAWN BY<br><i>PH</i>          | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA                 |                        |
| CHECKED<br><i>[Signature]</i> | APPROVED<br><i>[Signature]</i> | DRAWING NO.<br>D212-664-241  | REV. C<br>SHEET 1 OF 3 |
| DATE<br>07.03.08              |                                | TITLE<br>CROSSTUBE ASS'Y (205/212 HI AFT) NTS                            |                        |
| A                             | 00.12.12                       | NEW ISSUE  |                        |
| B                             | 05.02.04                       | ADD HOLES FOR COMPATABILITY WITH BHT/AA SKIDTUBES                        |                        |
| C                             | 07.03.08                       | REMOVE -1009 ABRASION STRIP; ADD MAGNOBOND 6398, CUSHION, REVERSE CLAMPS |                        |

**RELEASED**  
*9.04.24 P*  
PER E.E.N. 025

| Qty | Part Number    | Description   |
|-----|----------------|---|
| X   | D212-664-241   | CROSSTUBE ASSEMBLY (205/212 HIGH AFT)   |
| 1   | D6006-129      | CROSSTUBE   |
| 2   | D2940-1        | SUPPORT   |
| 4   | D3595-063-530  | RUBBER CUSHION  |
| 4   | MS21920-28     | CLAMP (OR MS21920-30)   |
| A/R | MAGNOBOND 6398 | ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE) |

**GENERAL NOTES:**

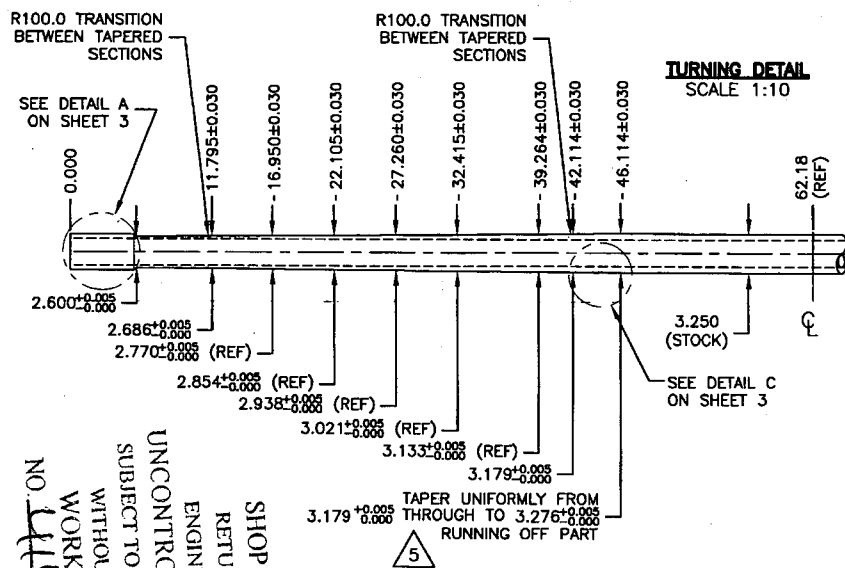
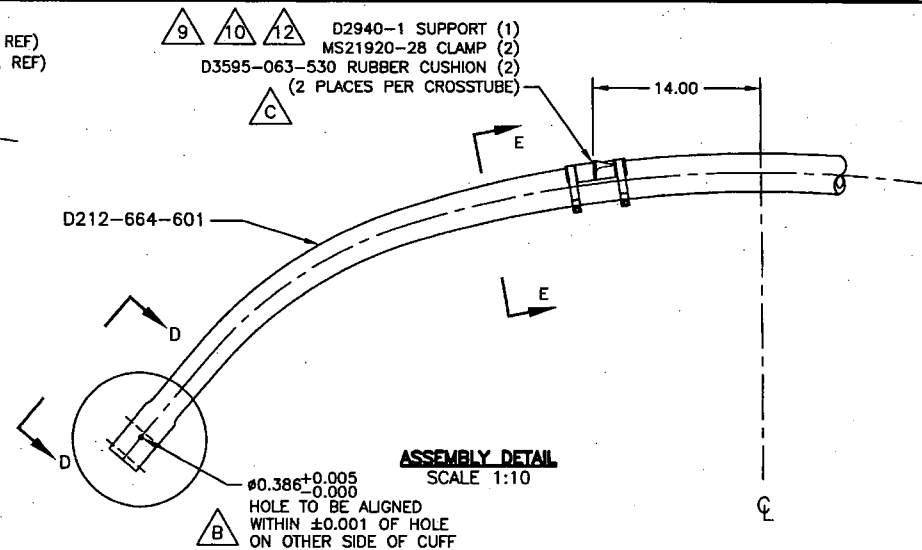
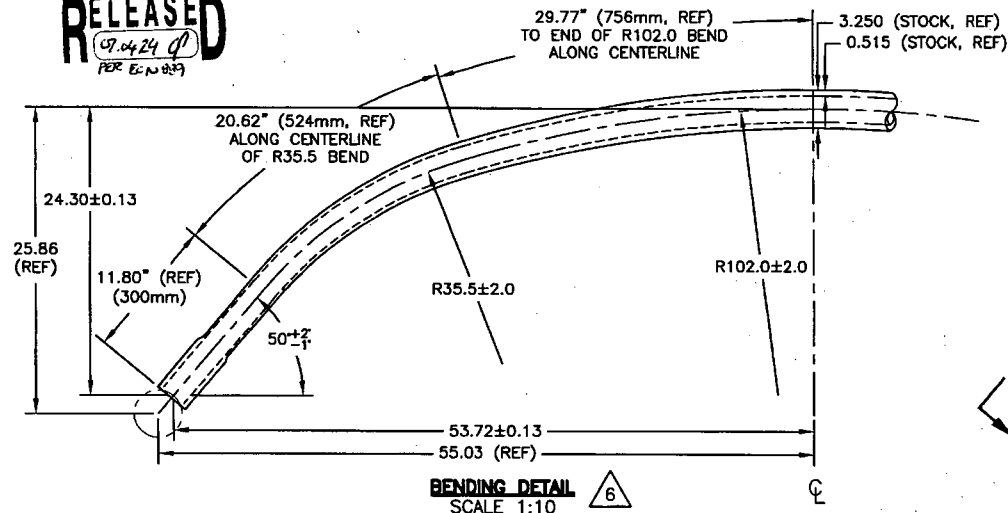
- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) MATERIAL: MANUFACTURED FROM D6006-129  
FINISHED LENGTH =  $124.36 \pm 0.020$
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2  
PAINT OUTSIDE PER DART QSI 005 4.2
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) RUN-OFF PART. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 6) BEND PROGRESSIVELY WITH A MINIMUM OF 5 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 7) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 8) SCRIBE DART PART NUMBER AND BATCH NUMBER IN THIS AREA WITH VIBRATING STYLUS.
- 9) INSTALL D2940-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 10) INSTALL MS21920-28 CLAMPS WITH D3595-063-530 RUBBER CUSHIONS TO SECURE D2940-1 SUPPORT ON TOP SIDE OF CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE OF CROSSTUBE SUPPORT  
**NOTE:** MS21920-30 CLAMPS CAN BE USED TO ACCOMMODATE VARYING DIAMETERS. ENSURE THERE IS A MINIMUM OF 1.5 THREADS IN SAFETY ON THE NUTS.
- 11) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 12) TORQUE CLAMPS 80 TO 100 IN-LB.

SHOP COPY  
RETURN TO  
ENGINEERING  
CONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 41401

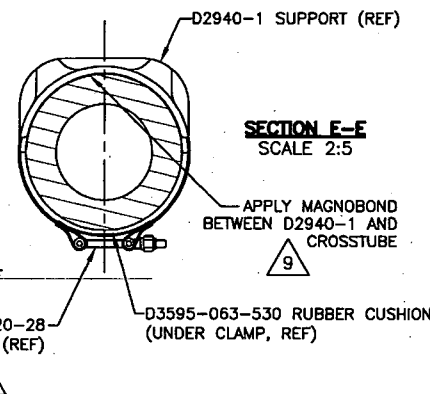
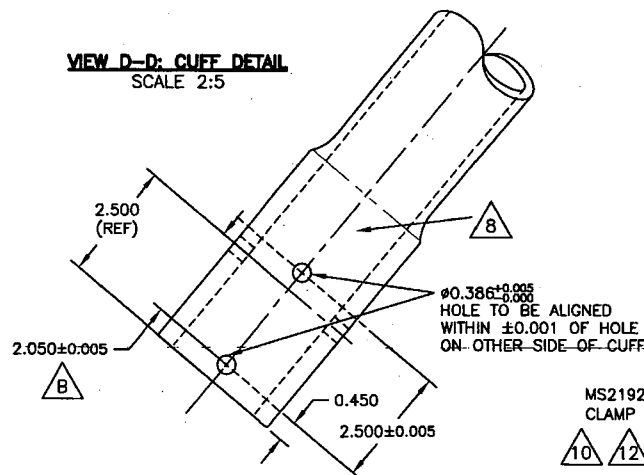
**Copyright © 2000 by DART AEROSPACE LTD**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**RELEASED**  
07.04.24  
PER E.P. 8-3



**VIEW D-D: CUFF DETAIL**  
SCALE 2:5



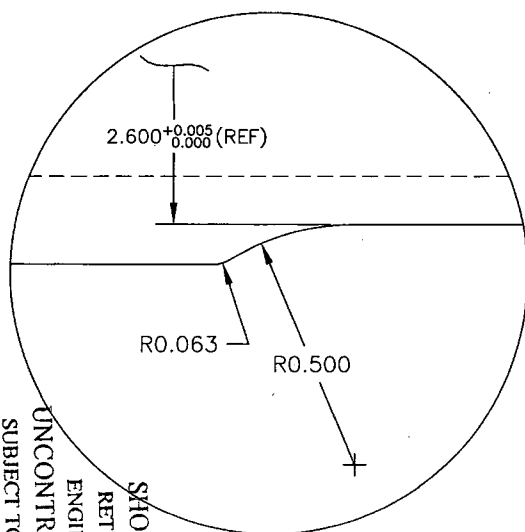
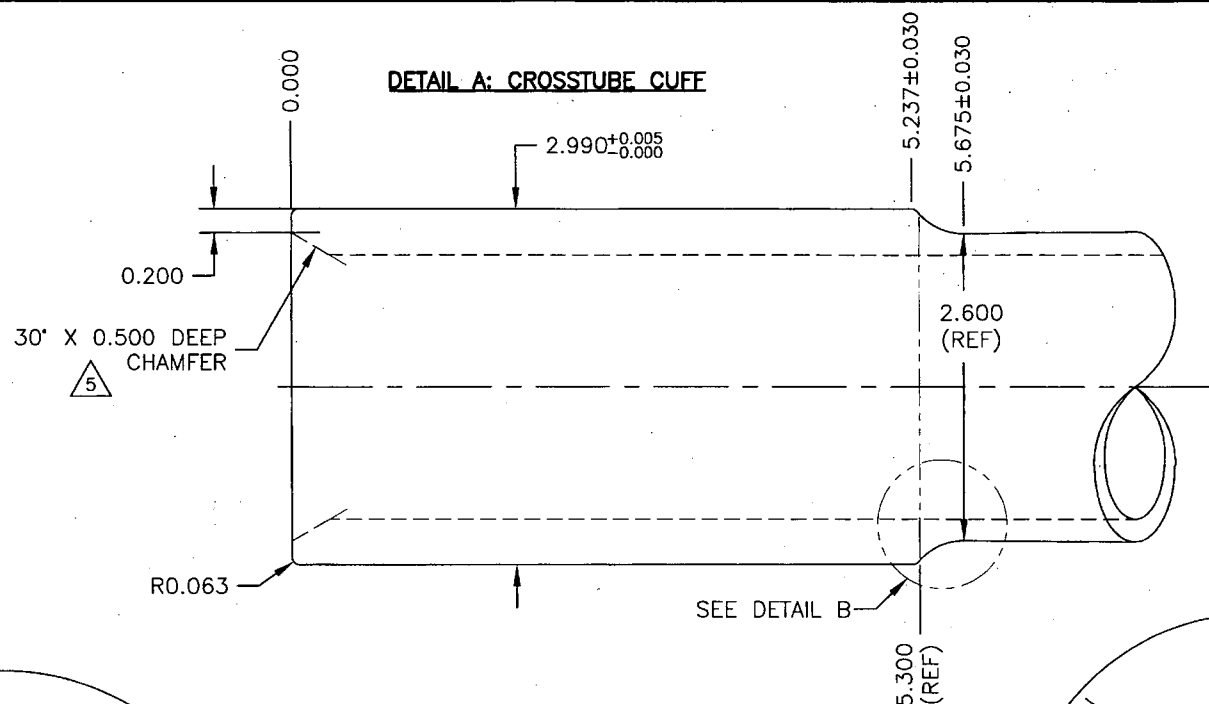
COPYRIGHT © 2000 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

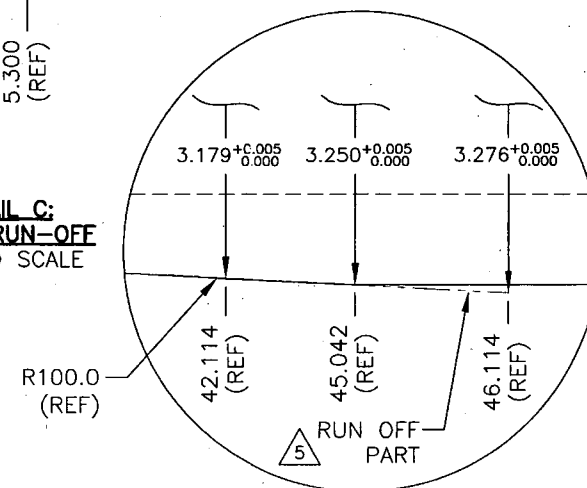
|                  |                |   |   |
|------------------|----------------|---|---|
| DESIGN<br>PH     | DRAWN BY<br>PH | <b>DART</b>                               | DART AEROSPACE LTD.<br>MARKHAM, ONTARIO, CANADA |
| CHECKED<br>J     | APPROVED<br>A  | DRAWING NO.<br>D212-664-241               | REV. C<br>SHEET 2 OF 3                          |
| DATE<br>07.03.08 |                | TITLE<br>CROSSTUBE ASS'Y (205/212 HI AFT) | SCALE<br>1:10                                   |

NO. 4440  
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER

**RELEASED**  
07.04.24  
PER ECN 805



**DETAIL C: TAPER RUN-OFF**  
NOT TO SCALE



NO. 4172  
WORK ORDER  
WITHOUT NOTICE  
SUBJECT TO AMENDMENT  
UNCONTROLLED COPY  
ENGINEERING  
RETURN TO  
SHOP COPY

|  |  |          |          |  |              |
|--|--|----------|----------|--|--------------|
| COPYRIGHT © 2000 BY DART AEROSPACE LTD.  |  | DESIGN   | DRAWN BY | <b>DART</b> DART AEROSPACE LTD.<br>HAWKESBURY, ONTARIO, CANADA | REV. C       |
| THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. |  | CHECKED  | APPROVED |  |              |
| DATE   |  | 07.03.08 |          | DRAWING NO.  | SHEET 3 OF 3 |
|  |  |          |          | TITLE  | SCALE        |
|  |  |          |          | CROSSTUBE ASS'Y (205/212 HI AFT)                               | 1:1          |



## LIQUID PENETRANT TEST REPORT

P - 1454 1

PAGE 1 OF 1

CLIENT DART AEROSPACE DATE AUG 28, 2008 TIME AM ☐ PM ☐  
ATTENTION LINDA LACELLE ACUREN JOB NO. 188 08 1454  
ADDRESS 1270 ABERDEEN ST POWO No. D/O 7041  
HAWKESBURY, ONT. WORK LOCATION HAWKESBURY, ONT.  
ACCEPTANCE STD. ASTM 1417/QSI-038 REV./DATE 2005  
PROJECT 412 HIGH AFT X TUBES, 212/205 HIGH FED X TUBES, 212/205 HIGH AFT X TUBES, 206L AFT X TUBE.  
ITEM(S) EXAMINED JOB#S 41153, 41154, 41155, 41391, 41392, 41401, 41402.

JOB DESCRIPTION PROCEDURE NO. LT-0002 REV./DATE TECHNIQUE NO. LT-TECH2 REV./DATE  
PART NO. D412664203 /D212664101/D212664201/D206667203. MATERIAL ALODINED ALUM. THICKNESS  
SCOPE WET FLOURESCENT LIQUID PENETRANT INSPECTION CARRIED OUT ON 100% EXTERNAL SURFACE

## TEST DETAILS

|                       |   |                                  |  |  |  |
|-----------------------|---|----------------------------------|--|--|--|
| METHOD                | <input checked="" type="checkbox"/> FLUORESCENT | <input type="checkbox"/> VISIBLE | <input checked="" type="checkbox"/> WATER WASH | <input type="checkbox"/> SOLVENT REMOVABLE                     | <input type="checkbox"/> POST EMULSIFIED |
| FAMILY BRAND          | MAGNAFLUX                                       |                                  | BLACK LGHT8171                                 | <input type="checkbox"/> OUTPUT > 1000 $\mu$ W/cm <sup>2</sup> | <input type="checkbox"/> AMBIENT < 2 fc  |
| PENETRANTZL67         | MINIMUM DWELL TIME                              | 45 MIN.                          | LIGHTING EQUIP.                                | <input type="checkbox"/> FLASHLIGHT                            | <input type="checkbox"/> TROUBLELIGHT    |
| PENETRANT REMOVER H2O | MINIMUM DRY TIME                                | >10 MIN.                         | OTHER  | CAL JUNE 16 08   |  |
| DEVELOPER SKDS2       | MINIMUM DWELL TIME                              | 10 MIN.                          | LIGHT METER S/N                                | CAL DUE DATE   |  |
| DEVELOPER TYPE        | <input checked="" type="checkbox"/> NON AQUEOUS | <input type="checkbox"/> AQUEOUS | <input type="checkbox"/> DRY                   |  |  |

## TEST SURFACE

SURFACE CONDITION ☐ AS GROUND ☐ AS WELDED ☐ MACHINED ☐ SHOT BLASTED ☒ CLEAN BARE METAL  
SURFACE TEMPERATURE ☐ < - 4°C/ 20°F ☐ - 4°C/ 20°F TO 10°C/50°F ☐ 10°C/50°F TO 52°C/125°F ☐ > 52°C/125°F

RESULTS- (☐ METRIC ☒ IMPERIAL)

FLUORESCENT LIQUID PENETRANT INSPECTION  
CARRIED OUT ON 100% EXTERNAL  
SURFACE ON:

412 HIGH AFT X TUBE JOB#S 41153, 41154.

212/205 HIGH FED X TUBES JOB# 41155.

212/205 HIGH AFT X TUBES JOB#S: 41401, 41402 ✓

206L AFT X TUBE JOB#S: 41391, 41392.

RESULTS: NO INDICATION OF DEFECTS.

ITEMS ACCEPTABLE TO STANDARD

**Scope of Services**  
The agreement of Acuren Group Inc. to perform services extends only to those services provided for in writing. Under no circumstances shall such services extend beyond the performance of the requested services. It is expressly understood that all descriptions, comments and expressions of opinion reflect the opinions or observations of Acuren Group Inc. based on information and assumptions supplied by the owner operator and are not intended nor can they be construed as representations or warranties. Acuren Group Inc. is not assuming any responsibilities of the owner operator and the owner operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the data or other information provided by Acuren Group Inc. In no event shall Acuren Group Inc.'s liability in respect of the services referred to herein exceed the amount paid for such services.

**Standard of Care**  
In performing the services provided, Acuren Group Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Acuren Group Inc.

## SIGNATURES

|                         |                            |                            |
|-------------------------|----------------------------|----------------------------|
| CLIENT REPRESENTATIVE   | DTR # E 19934              |                            |
| TECHNICIAN (SIGNATURE): | SIGNATURE                  | REPORT REVIEWED BY:        |
| NAME (PRINT):           | NAME                       | INITIALS                   |
| JASON HEWETT            | 1 <sup>ST</sup> TECHNICIAN | 2 <sup>ND</sup> TECHNICIAN |
| CGSB LEVEL 2 SNT LEVEL  | CGSB LEVEL SNT LEVEL       |                            |
| CGSB REG. No 6156       | CGSB REG. No               |                            |

WHITE - CLIENT COPY

CANARY - OFFICE COPY

PINK - TECHNICIAN COPY

GOLD - OFFICE COPY